

Career development programs and employee retention: Insights from the Ministry of Works in Tanzania

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Abstract

This study examined the relationship between career development initiatives and employee retention at the Ministry of Works in Tanzania. The study was guided by equity theory, which was founded on the assumption that employees tend to remain with their organisation when they are perceived to be treated equally. Cronbach's Alpha coefficient was used to assess the variable's reliability. A cross-sectional design was employed to collect quantitative and qualitative data from survey questionnaires and interviews. Quantitative data were analysed using descriptive and inferential statistics, while qualitative data were analysed through content analysis. The study found that employee retention at the Ministry of Work is high. In addition, the study findings revealed significant positive effects of career development programs on retention, including education opportunities (coef. = 1.884, $p = 0.016$), fair career development opportunities (coef. = 1.2122, $p = 0.001$), and involvement in innovation and creativity (coef. = 1.5216, $p = 0.000$). Similarly, qualitative findings indicated that career development programs, including educational opportunities, career autonomy, and recognition practices such as awards and promotions, significantly enhance employee retention. The study contributes to existing knowledge by demonstrating that well-structured career development programs significantly enhance employee retention. It is recommended that organizations invest in training, career autonomy, and innovation opportunities to further improve retention rates and reduce turnover.

Keywords: *autonomy, job satisfaction, recognition, work-life balance*

Article History:

Received: August 25, 2024

Accepted: October 1, 2024

Revised: September 23, 2024

Published online: November 9, 2024

Suggested Citation:

Augossy, H., Msacky, R. & Magasi, C. (2024). Career development programs and employee retention: Insights from the Ministry of Works in Tanzania. *International Journal of Academe and Industry Research*, 5(4), 98-123. <https://doi.org/10.53378/ijair.353120>

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1. Introduction

Employees are a crucial resource for the performance of any organisation (Lionel et al., 2023) and the backbone and blood vessels since their knowledge, experience, skills and efforts are critical to an organisations' competitiveness (Biason, 2020; Msisiri & Dennis, 2017). Thus, retaining skilled employees is considered an important source of competitive advantage for any organization (Gorge, 2019). Globally, retaining employees has become a currently critical issue faced by organizations (Msisiri & Dennis, 2017; Patro, 2022). Employee retention is an important indicator of effective human resource management (HRM) and organizational performance (Antony et al., 2023; Allozi et al., 2022). The success and sustainability of organisation depend on its ability to keep competent employees over the long term (Choudhary, 2016; Das & Baruah, 2013). This is possible only when the employees are satisfied with the work and the organizational strategies adopted to retain them (Biason, 2020).

Employee retention refers to organization's ability to keep potential employees for a longer period of time (Gorde, 2019). Employee turnover rate, which reflects the percentage of employees voluntarily leaving the firm over a defined time period, is one of the most frequent indicators of low employee retention capacity of the organisation (Allen et al., 2004; Silva et al., 2019). Retention of skilled and competent employees is linked with employees' job satisfaction, commitment and performance (Antony et al., 2023; Steil et al., 2022). According to Al-Suraihi et al. (2021), when employees are satisfied with their work and the organisation's environment, the chance of the organization to retain them for a longer period of time is higher than for discouraged employees. In addition, Dwesini (2019) iterated that commitment to organisation's course, loyalty and hard work are the features of employees who decide to stay with the organization.

According to Das and Baruah (2013), the main challenge for the human resource (HR) departments in organisations is not only to recruit and manage suitable employees but also to retain them for a long time. The challenge of retaining the best employees in organisations and governments emerged due to growing competition for highly skilled and qualified personnel, who are relatively scarce among organisations in both local and international environments (Terera & Ngirande, 2014). Essentially, the advancement of every sector of the economy and the integration of economies of countries have provided employees with multiple job opportunities from one field of work to another and geographical mobility across international borders (Chepkosgey, 2019). Thus, with the current exponential increase in demand for

qualified employees, organisations that fail to retain their highly performing employees will lower their competitiveness capacity (Sinha, 2012).

Theoretically, employees leave their jobs or switch from one organisation to another for a variety of reasons, including an unclear career path, a wretched work relationship between employees and employers or among employees (Buhari et al., 2020), a lack of recognition and appreciation, poor working conditions (Kumar, 2016), inadequate perks and compensation (Mandhanya, 2015) and employee's expectations (Bussin et al., 2017). Several studies conducted in Europe, Asia and United States of America, (Mandhanya 2015; Holston-Okae & Mushi 2018; Al-suraihi et al., 2021; Bolt et al., 2022; Pregnolato et al., 2017), found that absence of clear plan for career advancement for employees, pay, work environment, recognition and job related factors such as security, safety, stress and satisfaction are the frequent reasons given by employees why they change jobs and organisations.

Studies conducted in Africa, such as Dwesini (2019) and Pepple et al. (2021), conveyed that employees retention is a very serious problem for many organizations and governments. Similarly, Ezeuduji and Mbane (2017), Mohajane (2017) and Dwesini (2019) point out that lack of promotion, rewards, heavy workload, lower pay, unfair compensation, and lower management support are the main reasons organizations fail to retain the best employees. Mule et al. (2020) argue that rewards in terms of career development increases employee retention in organizations. Apart from losing the best employees, failure to retain employees has a huge impact on an organization due to the costs associated with recruiting new employees and can negatively impact the productivity, sustainability, competitiveness, and profitability of an organization (Holston-Okae & Mushi, 2018).

According to Bolt et al. (2022) and Kossivi et al. (2016), factors affecting ability of organisations to retain their most qualified employees vary from one organisation to another. As such, different firms can use different strategies to retain their best employee (Cardy & Lengnick-Hall, 2011). Also, an organisation can use different strategies to retain employees depending on their diverse needs, expectations, and job perceptions, or it can use different strategies to retain the same employee (Javed et al., 2014). Essentially, employee retention strategies refer to the methods and policies applied by organisations that encourage employees to stay with the organisation for extended periods of time (Aman-Ullah et al., 2020). The major common strategies used include rewards, on-job training and development, talent

management, employee engagement, work-personal life balance, quality of work environment, adequate wages and social relationships (Haldorai et al., 2019; Rathi & Lee, 2015).

Although employees' retention strategies vary, most organisations commonly employ career development opportunities as one of their employees' retention methods (Izidor, 2016). Career development usually involve opportunities given to employees to engage to long- or short-term education and trainings. In general, career development intends to give an employee a promising future of his/her profession as motivation to make them satisfied with the job. A study conducted by Phyu et al. (2023) discovered that employers who invest in the career development of their employees experience a higher level of employee satisfaction and, hence, a higher retention rate since employees' long-term goals are met. For employees to feel valued and motivated to stay in an organisation for longer period, it is critical that they have a clear understanding of their career path. A well-defined career path is necessary for increasing employee satisfaction and increase their intent to stay (Ferdiana et al., 2023).

In Tanzania, employee retention strategies are influenced by a variety of practices in human resource management, including motivation, basic pay, incentives, quality of working environment, job security, career path, employer-employee interactions, and work-personal life balance (Kahungya, 2016; Jovin, 2018). Tanzanian Government has adopted various major reform measures to improve public sector performance, which also targeted to ensure the retention of potential workers in the public sector. The most remarkable reforms include Local Government Reforms in Tanzania 1998-2008, Public Service Reform Programme-Phase I (PSRP I): 2000-2007, Public Service Reform Programme - Phase Two (PSRP II) (2008-2012). All these reforms aimed at strengthening government structures, improving organizations capacity to deliver quality service (e.g. recruits, develop, retain, empower, motivate, and nurture), and addressing institutional shortcoming (e.g. introduction of management system) (Kiragu & Mutahaba, 2006). In view of the retention problem of public employees among other issues, the Government of Tanzania formulated the National Public Pay and Incentive Policy of 2010, established the public service standing order in 2009, and instituted specific Ministry for Human Resource Management and Good Governance in 2021. Career development programs was among statutory benefits that postulated by the said reforms (Lameck, 2021; Jovin, 2018; Kahungya, 2016).

Ministry of Works (MoW) as one of the public organizations in the government of Tanzania (URT) benefits from the reforms. However, considering that most of employees at

the MoW are civil engineers who are considered scarce relative to their demand, retaining them is of paramount importance (Kikwasi, 2011). Thus, the MoW is among the government ministries that fully implement the public sector and HR managerial reforms as strategies to retain its best employees. The Ministry prepares and implements a training plan each year that focuses on developing employees' careers with the aim to make its employees satisfied with their job and stay with the organization for a long time. However, an average of five (5) employees leave the Ministry of Works for various reasons every year (AEAS, 2022).

Despite public organizations in Tanzania implementing job security, stability, and various on-the-job training and career development opportunities, employee turnover remains a pressing issue in particular within the Ministry of Works in Tanzania (Ambukege, 2020; Lameck & Kinemo, 2021; Peter, 2014). Factors such as inadequate compensation, insufficient incentives, human resource management challenges, and perceived unfair reward systems continue to drive employees away (Ambukege, 2020; Lameck & Kinemo, 2021; Peter, 2014). Additionally, the public sector is plagued by unequal pay scales for employees with similar qualifications across different government ministries and agencies (Tijdens & Kahyarara, 2012), further exacerbating the high turnover rates (Lameck & Kinemo, 2021; NBS, 2018).

Globally, studies have been conducted on employee retention and the effects of various strategies, including career development, recognition, and promotions (Patel & Rana, 2020; Emerson, 2018; Smith et al., 2021; Manento, 2020; Lee, 2017; Phyu et al., 2023; Wilkin & Kamau, 2014) from various countries including Kenya, United States of America, Ghana, India, Nigeria, England and Canada. Few available studies in Tanzania on career development and retention of employees had their focus on the private sector, mainly commercial banks (Kokoito, 2022; Msangi et al., 2022; 2021; Shao et al., 2019; Richard & Dennis, 2017). Thus, there is a notable dearth of literature focusing on career development and retention of employees from public sector ministries and in particular within the Ministry of Works in Tanzania. A study on career development and retention in the context of public sector in Tanzania is important to provide a thorough understanding of how career development initiatives such as training, career progression opportunities, and fair career advancement affect employee retention. Similarly, this study offers valuable recommendations for policymakers and decision-makers to design more effective career development strategies and retention programs in the public sector, ultimately improving employee commitment and reducing turnover. Therefore, this study is set to examine the relationship between career development

initiatives and employee retention at the Ministry of Works in Tanzania. In addressing the broad objective of the study, the following were given answers: the status of employees' retention at the Ministry of Work in Tanzania; and the effect of career development program on employees' retention at the Ministry of Work in Tanzania.

2. Literature Review

2.1. Theoretical literature review

The foundation of this study is based on equity theory, which was postulated by Adams in 1963. The theory is based on the idea that workers desire to be treated fairly and frequently compare themselves to their counterparts. Al-Zawahreh and Al-Madi (2012) contend that the fundamental tenet of equity theory is the notion that employees work hard for the organisations they are employed by with the hope of receiving rewards, which may include a salary and other advantages such as non-monitory rewards in a fair basis. Employees get motivation due to the balance between their efforts at work and their perception for career growth among other things (Habib et al., 2017). According to the equity theory, workers frequently compare their returns to other people to measure how fair they are. When workers believe they are not being treated properly, they lose motivation and may be driven to act, which may also have an impact on retention. Equity theory aligns with this study as it can provide a valuable lens that enables examining the effect of career development opportunities as one of non-monetary reward strategy on employee retention. It helps in understanding employee's perception on the fairness of career opportunities and how these perceptions influence motivation and retention. The theory provides deeper understanding of the underlying mechanisms driving the relationship between career development and employee retention, thus, offer practical insights for organizations aiming to enhance employee satisfaction and retention.

Equity theory has several notable weaknesses. The theory does not consider other factors that can influence equity perception, such as personal and cultural differences which may affect the perception of equity (Davlembayeva et al., 2021). According to Romer (1979), the application of equity theory is restricted sources, which cannot be measured and divided. Moreover, the equity theory is difficult to apply consistently in a variety of organizational contexts because it ignores elements like personal preferences, personal influences, cultural influences, and the effect of external factors on personal fairness. Despite these weaknesses, still equity theory is useful in explaining the dynamics of the career development programs

such as fair career opportunities, autonomy in career path, innovation and creativity and training/education opportunities and their implication in employees' retention. Also, the theory helps to clarify the usefulness of career development in promoting job satisfactions, employee engagement and overall retention. Similarly, equity theory is the most suitable framework for this study because it specifically examines how perceptions of fairness in career development opportunities impact employees' decisions to remain with or leave the organization, making it particularly relevant for understanding retention at the Ministry of Works in Tanzania.

2.2 Empirical review

There is a substantial body of research examining the relationship between career development opportunities and employee retention. For instance, the study conducted by Mule et al. (2020) in Kenya context, concluded that career development positively influences employee retention. The study adopted descriptive survey research design with sample size of 510 employees of County Government of Meru. The findings revealed a positive and significant relationship between career development and employee retention ($r=0.521$, $p=0.000$). Another study by Al-sharafi et al. (2018) sought to investigate the effect of training and career development on retention of employees on Yemen's telecommunications organisations. The study also examined the mediating role of the work satisfaction in the relationship of preparation, career growth, and retention of employees. The findings showed that training was found to enhance employee satisfaction and increase the retention rate in Yemen's telecommunications market. On the other hand, study by Mushi and Kinyondo (2022) examined the relationship between career development opportunities and job retention among employees in Tanzania. The researchers postulated that employees with more access to career development opportunities would have higher levels of job retention. The results showed a statistically significant positive correlation between career development opportunities and job retention ($r = 0.42$, $p < 0.01$). Employees who had more access to career development were more likely to intend to stay with the organization and had lower actual turnover rates. Unlike the study by Mushi and Kinyondo (2022), Mule et al. (2020) and Al-sharafi et al. (2018) who focused on training and mentorship aspects of career development, this study extends further to other aspects including autonomous in career path, innovation and creativity opportunities as well as fair career opportunities rewards.

3. Material and Methods

3.1 Research approach and design

Based on the nature of the study, pragmatism philosophy was used to guide the study. The pragmatism combines qualitative and quantitative methods (Denscombe, 2008). It blends the pure quantitative approach that follows positivism research philosophy and pure qualitative approach underpinned by the interpretivism philosophy (Creswell & Clark, 2011). Thus, in this study, data was collected using mainly a questionnaire, and in-depth interview. This study adopted a cross-sectional research design, which involve both inferential and descriptive statistics to summarize the data. It further consents the selection of representative sample from the target population and gathers quantitative, qualitative, or a combination of both data at one particular time (Setia, 2016). A total of 152 questionnaires were distributed containing the relevant questions regarding retention indicators and career development program variables. Quantitative data was analysed using both descriptive analysis and inferential analysis. Descriptive analysis was done to determine the magnitude of the employees' retention. Binary logistic regression was used to examine the effect of career development programs on employees' retention. Furthermore, qualitative data was gathered from five key informants who possess first hand understanding of the organization. The qualitative data was then analysed using content analysis method.

3.2 Area of the study

This study was conducted at the Ministry of Works in Dodoma City, an administrative city where the MoW headquarter is located in Tanzania. According to the URT (2024), majority of the MoW employees are situated at the headquarter. Thus, the area was purposefully selected to ensure the feasibility of the study in terms of access to data and participants. Similarly, the MoW unlike other Ministries has unique mandate associated with construction industry. Thus, it is engaged into big constructions projects which involve planning, development and maintenance of various infrastructures, including roads, bridges, buildings, airports, harbours, highways, subways, railroads, and transit systems (URT, 2024). Due to its core functions majority of its employees are civil engineers. According to Kikwasi (2011), the construction industry in Tanzania is characterised by having high demand of competent and experienced civil engineers in both public and private sector. Based on that context, examining the relationship between career development initiatives and employee

retention at the MoW in Tanzania provides a more significant insight of strategies of retaining highly demanded human resource in public sector.

3.3 Study population and sampling

The target participants in the study were all staff members of the MoW who are based in Dodoma. The decision to consider all staff as the target population was built from previous studies dealing with retention used human elements as the unit of enquiry and analysis to provide their personal experience on issues that make them stay, leave or satisfied with the organisation (Ambukege, 2020; Biason, 2020; Abba & Odeleye, 2018). For this case, the sampling frame was 247 staff members working at the MoW (Payroll audit, 2022). The sample size was computed using a statistical formula developed by Yamane (1967) with a confidence level of 95% and margin of error of 0.05. Thus, the sample size from the applied formula was 152.

The study adopted both probability and non-probability sampling techniques in the selection of the different units for the study. Firstly, the study used purposive sampling to select the study area and 8 key informants from the MoW. The key informants were the in-charge of human resource and administration in the MoW. Thereafter, the stratified sampling was employed to select 152 workers from the target population. This stratified sampling has been chosen based on the views of Kothari (2004), that it is appropriate in selecting the true representative sample in the situation where the population under investigation is heterogeneous is obtained. The stratified sampling involved dividing the target population into three strata, namely, strata of directors and managers, strata of head of department and supervisors, and strata of subordinates. In every stratum, a simple random sampling was employed using lottery technique that gave every member in each stratum an equal chance of being selected.

3.4 Reliability and validity of statistics

The overall reliability statistics for career development and retention was assessed using Cronbach's Alpha coefficient. The coefficient measures how well a set of variables or items measures a single, one-dimensional latent aspect of individuals. All variables with >0.7 Cronbach's Alpha coefficient are considered to have acceptable level of internal consistency, and hence data collection instrument was reliable (Bell et al., 2022). The reliability score for

career development was 0.922. Also, the Cronbach's Alpha for retention was 0.786. The reliability statistics findings indicate high internal consistency among the items, suggesting that the data collection instrument effectively captures the intended constructs related to career development and employee retention. Moreover, the study validity was ensured throughout the research process. First, the data collection instruments were evaluated by research expert in public administration and management for comments and opinions from the College of Business Education and University of Dodoma in Tanzania. Similarly, validity was attained using pre-testing of data collection tools through opinions of experts' and through pilot study. Moreover, study validity was enhanced through data triangulation by collecting data from multiple sources (questionnaire and interview), which allowed for cross-verification of findings. This approach reduced potential biases and ensured a more comprehensive understanding of the research problem, thus strengthening the credibility and robustness of the study's results.

3.5. Ethical consideration

The study considers all ethical guidelines during the entire research process. First, the study obtained approval from the research and publication committee of the College of Business Education. Also, permission for data collection exercise was obtained from the management of Ministry of Works in Tanzania. In the field, before interviewing respondents, the researcher explained the intention of the study to every respondent and clarify the study's purpose. The respondents were given rights to give their informed consent about the subject matter. Respondents were also informed of their right to freely involve in the study and unrestricted freedom to leave at any moment. Similarly, for confidentiality and security purpose, the real names of the respondents are not disclosed in this study. Moreover, all secondary data and some other pieces of information used are appropriately acknowledged in order to avoid plagiarism.

4. Results and Discussion

4.1 Employee retention summary statistics

This part intended to examine the status of employee retention within the MoW. The computation of descriptive statistics that includes mean, standard deviation scores of the indicative parameters related to employee retention was done in table 1. The computation

method was patterned from the study of Phyu et al. (2023) and Abba and Odeleye (2018). The attributes interpreted in this matter are intention to stay, job satisfaction, intention to leave, work-life balance, and an overall retention score. The analysis reveals that the mean score for intention to stay is 4.327, indicating a high level of commitment among employees to continue working in the organization. The standard deviation (Std. Dev.) of 0.402 suggests relatively consistent responses across employees, with minimal variability in their intentions to stay. In terms of job satisfaction, the analysis depicts a mean score of 4.091, reflecting a generally high level of satisfaction among employees with their roles and responsibilities. The standard deviation of 0.497 indicates slightly more variability in job satisfaction compared to intention to stay. For an intent to leave, the statistics portrays a mean score of 1.807, indicating a low likelihood of employees considering leaving the organization. The low standard deviation of 0.395 suggests that responses regarding the intention to leave are relatively consistent across employees. Lastly, mean score of 3.587 were observed in terms of work-life balance computation suggesting a moderate level of perceived balance between work and personal life among employees. The standard deviation of 0.495 indicates some variability in perceptions of work-life balance among employees.

Table 1

Employee retention summary statistics

Indicators	Mean	Std. Deviation
Intention to stay	4.327	0.402
Job satisfaction	4.091	0.497
Intention to leave	1.807	0.395
Work life balance	3.587	0.495
Overall	4.219	0.412

Source: Field data (2024).

The overall retention score, obtained by combining multiple interpreted factors portrays a mean score of 4.219 which indicates a generally positive outlook on retention factors within the organization. The standard deviation of 0.412 suggests moderate variability in overall retention perceptions among employees. The findings collectively indicate that employees express a strong intention to stay and high job satisfaction, indicating positive sentiments towards their roles and the organization. The low intention to leave score further

reinforces the idea of employee commitment and loyalty. While work-life balance scores slightly lower than other factors, the overall retention score is positive, suggesting that the organization generally performs well in retaining its employees. The outcome relates to the findings of Mahadi et al. (2020) on the determinant factors for employee retention which revealed that the organisational retention rate is determined by employee intent to stay or leave and the individual level of satisfaction.

Table 2

Employee retention

Category	Frequency	Percentage	Overall mean	Standard deviation
Yes	120	78.95	4.219	0.412
No	32	21.05		

Source: Field data (2024).

The results in table 2 established dual group using overall mean score of retention (Yes and No groups) presenting the frequency and percentage of employees who have either stayed (Yes) or need to leave (No). The majority of employees, accounting for 78.95% (120 employees), are willing to be retained (Yes), indicating that they still need to work within the organization. A smaller proportion of employees, 21.05% (32 employees), are not willing to be retained (No), suggesting that they are wishing to leave the organization for various reasons. These results highlight a relatively high retention rate among employees, with the vast majority choosing to stay within the organization. However, the presence of employees who need to leave also indicates a need for ongoing efforts to understand and address factors influencing retention, such as job satisfaction, career development opportunities, work-life balance, and organizational culture. Analysing the reasons behind employee departures can provide valuable insights for improving retention strategies and creating a more engaging and supportive work environment. The findings were backed up by the argument from key informants who assert that,

“employees at this Ministry are very committed to their roles, for a while now I haven’t had any case of an employee with an intention to leave the Ministry unless it’s for a very necessary reason like moving to another city to be with their families. This may simply mean that employees are likely to be satisfied with their job here at the MoW” (Interview conducted on 20 March 2024 at Ministry of Works, in Dodoma)

4.2 Association between career development programs and employee retention

The association between career development programs and job retention within the MoW was analysed at a 0.05 level of significance using chi-square tests in table 3.

Table 3

Association between career development programs and employees' retention

Variable	Low performance	High performance	Chi-square	P-Value
Opportunity for education			55.0225	0.007
No	15 (26.79)	41 (73.21)		
Yes	17 (17.71)	79 (82.29)		
Autonomy in career path			42.0832	0.00
No	23 (23.21)	33 (76.97)		
Yes	29 (19.79)	67 (80.21)		
Fair career development opportunity			52.3225	0.00
No	13 (23.21)	43 (51.43)		
Yes	19 (19.79)	77 (80.21)		
Innovation and creativity				
No	7 (14.58)	41 (85.42)	44.0178	0.016
Yes	25 (24.04)	79 (75.96)		

Source: Field data (2024).

The study contemplates opportunity of short- and long-term trainings/education, autonomy in career path and fair career opportunities as the key indicative parameters of career development. The analysis of the employees who had opportunities for long or short-term trainings/education showed a significantly higher job retention rate (Yes) compared to those who did not have this opportunity (No). The chi-square value is 55.0225, with a significant p-value of 0.007, indicating a strong association between education opportunities and job retention. Similarly, the assessment on the autonomy in career path, shows the employees who had autonomy in their career paths (Yes) demonstrated a significantly higher job retention rate compared to those without autonomy (No). The chi-square value is 42.0832, with a very low p-value of 0.00, indicating a highly significant association between career path autonomy and job retention. On the other hand, employees who perceived to have fair career development opportunities (Yes) were significantly more likely to be retained in their jobs compared to those who did not perceive fairness in career development (No). The chi-square value is 52.3225,

with a very low p-value of 0.00, indicating a highly significant association. Innovation and creativity show that employees who had opportunities for innovation and creativity (Yes) had a significantly higher job retention rate compared to those without such opportunities (No). The chi-square value is 44.0178, with a p-value of 0.016, indicating a significant association at the 0.05 level. Overall, the analysis reveals strong associations between various career development programs (opportunity for education, autonomy in career path, fair career development opportunities, and innovation/creativity opportunities) and job retention within the MoW. These findings suggest that investing in these career development aspects can significantly influence job retention rates among employees. Base on equity theory, employees tend to be more likely to feel involved and content with the organisation if they believe there is a greater degree of equity, supported by organisation's investment in their career growth. Due to this, perceived equity may result into improved job retention and workers are less likely to leave the organisation in quest of better career opportunities elsewhere.

The results are consistent with research on the relationship between career development and employee retention in the hospitality industry conducted by Wilkins and Kamau (2014). According to Wilkins and Kamau (2014), organisations that offer well-structured career development programs that include training opportunities, mentorship programs, and employee rotations in career opportunities have been able to increase employee intent to stay with the organisation longer than those that do not provide such opportunities. It was also entrenched by Patel and Rana (2021) and Pentang (2022) that workers were more inclined to stick with their organisations if they had access to options for professional growth, such as coaching, job shadowing, and training. The study emphasized the importance of aligning career development programs with the organization's strategic goals and employee needs.

4.3 The effect of career development programs on employee retention

Diagnostics for the Logistic Regression. The effect of career development programs on employee retention was assessed using binary logistic regression model. Different test statistic was deployed to assess the accuracy of the binary logistic regression model.

Omnibus tests of model coefficients. The model goodness of fit was tested using Omnibus tests of model coefficients in table 4. The chi-square value for the logistic regression model assessing the impact of career development programs on job retention is 12.0036, with 4 degrees of freedom. The significance level (p-value) associated with this model is 0.002,

which is below the 0.05 threshold, indicating a statistically significant relationship between career development programs and job retention. This suggests that investing in career development programs can influence job retention rates within the organization.

Table 4

Omnibus tests of model coefficients

Step	Chi square	Df	Sig
1	12.0036	4	0.002

Hosmer and Lemeshow model test. The Hosmer-Lemeshow goodness-of-fit test in table 5 suggests that the logistic regression model fits the data well. According to Archer et al. (2007), a good fitting model has to have a value greater than 0.05. The test of career development programs effects on job retention reveals a chi-square statistic of 2.1651 with 8 degrees of freedom (df) yields a significance level of 0.124, which is greater than 0.05. This indicates that the model fits the data well for this category. It entails that the logistic regression model adequately describes the relationship between the predictors and the dependent variable.

Table 5

Hosmer and Lemeshow model test

Step	Chi square	Df	Sig
1	2.1651	8	0.124

4.4 Findings on the effect of career development programs and employee retention

The assessment of the influence of career development programs variables on job retention was done by using binary logistic regression analysis at a 0.05 level of significance in table 6. The results depict that there is statistical significance relationship of all the variables with employee retention. "Opportunity for education," employees who have opportunities for education have a coefficient of 1.884, indicating that they are 3.547 times more likely to have high retention compared to employees who do not have such opportunities. This result is statistically significant, with a z-value of 12.44 and a p-value of 0.016, suggesting a strong association between education opportunities and job retention. Regarding "autonomy in career path," employees with autonomy in their career paths have a coefficient of 0.2122 and an odds ratio of 1.1783, indicating a moderate effect on retention. The p-value of 0.106 suggests that

this relationship is statistically significant at the 0.05 level. For "fair career development opportunity," the coefficient is 1.2122, with an odds ratio of 1.996, indicating that employees with fair career development opportunities are significantly more likely to have high retention rate ($z = 13.83$, $p = 0.001$). Additionally, "involvement in innovation and creativity" exhibit a strong positive impact on job retention, with a coefficient of 1.5216 and an odds ratio of 2.01. Employees involved in innovation and creativity are significantly more likely to have high retention ($z = 18.54$, $p = 0.000$). The constant term in the model represents the baseline odds of low retention when all other variables are held constant. The model's goodness of fit is supported by the LR Chi2 value of 138.4 and a significant Prob > Chi2 value of 0.000, indicating that the model is statistically significant. The Pseudo R2 value of 0.53 suggests a moderate-to-high level of explanation provided by the model regarding the variation in employee retention. In summary, career development programs such as education opportunities, fair career development, autonomy in career path and involvement in innovation and creativity significantly impact job retention in the Ministry of Works.

Table 6*Binary logistic regression analysis*

Employee retention	Coef.	Odds Ratio	Z	P> z
Low (base outcome)				
Opportunity for education				
Yes	1.884	3.547	12.44	0.016
No (Reference)				
Autonomy in career path				
Yes	0.2122	1.1783	2.87	0.106
No (Reference)				
Fair career development opportunity				
Yes	1.2122	1.996	13.83	0.001
No (Reference)				
Innovation and creativity				
Yes	1.5216	2.01	18.54	0.00
No (Reference)				
Constant	-1.1131	.06815	0.223	0.000
Number of observations = 152 LR Chi2(4) = 138.4				
Prob > Chi2 = 0.000 Pseudo R2 = 0.53				

Source: Authors compilation from STATA 17

Furthermore, the results were complemented by the interview discussion with identified key informants that revealed that as employees perceive to have an opportunity for further studies, they tend to be more satisfied with their job and increase their intent to stay longer. When employees believe that, they will have freedom to choose their career path and the opportunities are given in a fair bases increases their desire to stay with the organisation. Participants emphasized the substantial role of career development programs in enhancing employees' retention. As one interviewee explained,

"The Ministry believes in developing the career of its employees... It is described in our training program that every employee should attend at least one course every year to sharpen their capacity" (Interview conducted on 20 March 2024, Dodoma City).

This commitment to ongoing education was recognized as a major factor in employees' decisions to remain with the organization. Recognition was another key element affecting employee retention. One participant remarked,

"For a well-performing employee to keep on being devoted to their duties, it is very necessary to be noticed and recognised in any means possible" (Interview conducted on 15 April 2024, Dodoma).

The finding underscores that recognizing and valuing employees' performance through various means is essential for maintaining their commitment and continued dedication to their duties. Therefore, it is recommended that the organisation implement robust recognition programs to enhance employee retention.

Employees valued various forms of recognition, including awards, appreciation, and public acknowledgement. Another interviewee noted,

"Employees who were recognised in public during Workers Days' ceremonies were more committed, and their willingness to stay with the organization was higher since they felt valued" (Interview conducted on 22 April 2024, Dodoma).

This sense of being appreciated significantly contributed to their motivation and job satisfaction. Therefore, to boost employee commitment and job satisfaction, the organisation should enhance its recognition programs by incorporating awards, appreciation, and public acknowledgements, such as during Workers' Day ceremonies.

Promotions also played a crucial role in retention. One interviewee highlighted,

“Employees who experience an increase in responsibilities showed a significantly higher job retention rate” (Interview conducted on 5 May 2024, Dodoma).

Promotions that include increased responsibilities and flexibility are vital for enhancing employee retention, as they significantly contribute to employees’ commitment to their roles. Therefore, the organization should implement promotion policies that offer both increased responsibilities and greater flexibility to boost retention and ensure employees feel valued.

Another noted the importance of flexibility, stating,

“Providing employees with flexibility in their job roles has proven to be a significant factor in their decision to stay longer with the organization” (Interview conducted on 10 May 2024, Dodoma).

Flexibility in job roles is a crucial factor in encouraging employees to remain with the organization. Therefore, the organization should prioritize offering greater flexibility in job roles to enhance employee retention and satisfaction.

The qualitative findings reveal that career development opportunities, recognition, and promotions are pivotal in influencing employee retention and job satisfaction. To enhance retention, the organization should prioritize advancing career development programs, establishing comprehensive recognition initiatives, and offering flexible roles and promotional opportunities. These findings suggest that investing in career development aspects and fostering a culture of innovation can significantly contribute to a stable and motivated workforce. The research reliably shows that well-designed and implemented career development programs have a substantial progressive influence on improving job retention rates. Overall, the analysis reveals positive correlation between various career development programs (opportunity for education, autonomy in career path, fair career development opportunities and innovation/creativity opportunities) with job retention within the MoW. The results are in same comparison with Mule et al. (2020), whose study replicates that career development has a positive and significant relationship with employee retention. According to Abba and Odeleye (2020), employees tend to remain loyal and committed to the organization once they anticipate being given the opportunity to engage in education/training, anticipate the fair opportunities to develop their career and independence in their career path. Another study by Phyu et al. (2023) found employees who had an opportunity to engage in structured career

development programs had much greater employment retention rates than those who did not get that opportunity. The findings are also consistent with several management theories, including expectancy, social exchange, and equity theories.

5. Conclusion and Recommendations

The study concludes that the status of employee retention at the Ministry of Works is high. The study also reveals positive correlation between various career development programs (opportunity for education, autonomy in career path, and fair career development opportunities) with job retention. Thus, it is statistically significant to conclude that providing employees with various career development opportunities help enhance job retention. The study further advocates that, if employees perceive to get an opportunity for their career advancement, they will have more intent to stay with the Ministry. Moreover, it can be concluded from qualitative findings that career development opportunities, recognition, and promotions are pivotal in influencing employee retention.

To further enhance employee retention, several targeted recommendations for the Ministry are proposed. First, it is essential to implement structured career development programs that emphasize skill enhancement and leadership development. This approach ensures employees feel prepared for future roles within the organization. Additionally, enhancing recognition initiatives through a formal program, such as 'Employee of the Month' awards or quarterly recognition events, can cultivate a culture of appreciation. Facilitating mentorship opportunities is also crucial; establishing a mentorship program that pairs less experienced employees with seasoned professionals will promote knowledge transfer and professional growth. Promoting flexible career pathways is equally important, as it encourages employees to explore various career trajectories within the Ministry. This flexibility allows them the autonomy to shape their professional journeys while remaining committed to the organization. These findings collectively suggest that targeted investments in career development and effective recognition strategies are crucial for improving employee retention and satisfaction. The results provide valuable insights on the design and implementation of career development programs. The findings suggest that for the Ministry to retain its valuable employee has to consider investing more in career development programs which includes opportunity for further trainings/education, fair career development opportunities among its

employees and autonomy for employee to choose their career path. In summary, the findings shed light on the relationship between career development programs on job retention.

The study has significant implication for the government and policy makers in Tanzania. It highlights the need for prioritizing the formulation of effective career development programs. By investing in these areas, policy makers can enhance employee motivation, commitment, and retention, leading to improved service delivery and organizational effectiveness. While this study on the effect of career development on employee retention in the Ministry of Works in Tanzania offers valuable insights, it is important to acknowledge its limitations. The focus on one ministry restricts the generalizability of the findings to other sectors or organizations. Additionally, relying on self-reported data may have introduced biases and subjective interpretations. This study contributes theoretically by applying equity theory to understand how perceptions of fairness in non-monetary rewards affect employee retention. Empirically, it demonstrates that non-monetary rewards like recognition and career development significantly enhance employee motivation and retention, offering practical insights into the impact of reward systems on maintaining a committed workforce.

Based on the review made, much scope remains for more exploration in the field of employee retention by taking into consideration additional factors that may interact with employee retention, like compensation practices, leadership and supervision, alternative work schedules, working conditions, and flexible working hours. Understanding how these other factors influence employee retention can provide valuable insights for improving retention strategies. For generalisation purposes, further studies can be conducted on other Ministries' organisations to extend these findings. Furthermore, a comparative analysis study can also be done to determine the relative effectiveness of different human resource practices (e.g., career development programs and recognition programs) in improving retention in organisations.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was not supported by any funding.

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